

REMARKS

Applicants respectfully request that the above-application be re-examined.

The December 1, 2003, final Office Action ("Office Action") in the above-identified application rejected Claims 1-5, 8, 10, 11, 14, 16, 18, and 33 under 35 U.S.C. § 102(b) as being fully anticipated by the teachings of U.S. Patent No. 4,849,618 (Namikawa et al.). In addition, Claims 6 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of Namikawa et al. taken in view of the teachings of U.S. Patent No. 5,762,377 (Chamberlain), and Claims 9, 12, 13, 15, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of Namikawa et al. taken in view of the teachings of U.S. Patent No. 4,960,651 (Pettigrew et al.). Subsequent to receipt of the Office Action, applicant filed a response and received an Advisory Action. The Advisory Action indicated that proposed amendments to the claims in the response to the Office Action would be entered for purposes of appeal. The Advisory Action also contained a Response to Arguments section. This Amendment, which is being filed concurrently with a Request for Continuing Examination (RCE), makes additional amendments to Claim 1 in view of the comments contained in the Response to Arguments section of the Advisory Action.

Applicants respectfully submit that for the reasons set forth below all of the claims are clearly allowable in view of the teachings of the cited references. More specifically, applicants submit that the claims recite features that clearly patentably distinguish the claimed subject matter from the teachings of the cited and applied references, namely, that the embossed layer affects the magnetic properties of the soft-magnetic layer such that the effects are detectable externally of the security device and that the embossed pattern produces an optical defraction effect.

As previously noted in the response to the Office Action, embodiments of the present invention include a soft-magnetic layer, i.e., a layer formed of soft-magnetic material. Soft-magnetic materials are useful in security systems such as retail store security systems. A label or tag may possess a security device incorporating soft-magnetic material. The soft-magnetic material may be magnetized to activate the store security system if merchandise is illegally removed from the store and demagnetized when the merchandise is purchased. Thus the use of soft-magnetic material, which can be magnetized and demagnetized as required, is an advantage of the present invention over the security element disclosed in Namikawa et al. While Namikawa et al. may disclose a soft-magnetic layer, the existence of the hard magnetic layer negates the presence of the soft-magnetic layer. The hard magnetic layer pins the soft-magnetic

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

layer such that the soft-magnetic layer is aligned with the orientation of the hard magnetic layer and thus the soft-magnetic layer cannot be selectively magnetized and demagnetized. Also, by its nature, the hard magnetic layer in Namikawa et al. also cannot be magnetized and demagnetized. As amended, Claim 1, the only independent claim remaining in this application, clearly recites that the soft-magnetic layer is selectively magnetizable to show magnetic properties when exposed to a magnetic field. As noted above, such functionality is not present in Namikawa et al.

The invention is also distinguished in that the magnetic properties of the soft-magnetic layer are affected by the shape of the embossment and this effect is detectable externally of the security element. This results in an effect unique to the particular embossed pattern. This effect can be used as a security feature to determine genuine articles from counterfeit articles, which incorporate an optical diffraction effect without realizing the importance of the soft-magnetic layer. As a result, this effect becomes a covert security feature that is not detectable from a visible inspection of the security element. Because, in accordance with the present invention, this unique effect can be embodied in the soft-magnetic layer, the soft-magnetic layer serves a dual role. The soft-magnetic layer forms a magnetizable and demagnetizable theft prevention feature as described above as well as a genuine article determining feature.

It is also important to understand that the present invention is a combination of the embossment in the shape of the optical diffraction effect and the soft-magnetic layer. The type of embossment involved in the optical diffraction is on a micro scale compared to the macro scale of Namikawa et al. It is this micro scale that is believed to produce the change in properties of the soft-magnetic layer. Namikawa et al. does not teach embossment on a micro scale.

Furthermore, the invention is distinguished in that the particular shape of the embossment is an optical diffraction effect. The visual effects of optical diffraction are very different to what can be achieved by the macro embossment of Namikawa et al. Optical diffraction effects include holographic effects.

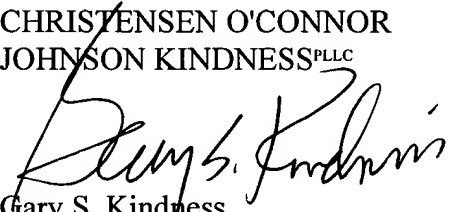
In the remarks previously submitted in response to the final Office Action, applicants argued that the type of embossment involved in the optical diffraction of the present invention is on a micro scale compared to the macro scale of Namikawa et al., and that Namikawa et al. does not teach embossment on a micro scale. The Response to Arguments in the Advisory Action (Fig. 10, E1 and E2) comments that in Namikawa et al. "there is an embossed layer having an embossed pattern of a particular shape which creates a variation of the surface. Therefore an optical diffraction effect will be produced when light hits the element." In response to this

comment, applicants note that, in order for diffraction effects to be noticeable, the size of the embossing, e.g., the lines of a diffraction grating, must be of the same order as the wavelength of light. A person skilled in the art will readily appreciate that if a parallel beam of light passes through a wide slit the diffraction is negligible. Since Namikawa et al. only discloses large scale embossings in the form of relief characters or stamped characters as illustrated particularly by embossment characters E1 and F2 in Figure 10, any diffractive effects produced when light hits such embossed characters would be negligible.

In view of the foregoing remarks, applicants submit that Claim 1 and all of the claims dependent therefrom, including those rejected under 35 U.S.C. § 103(a), are clearly allowable. Consequently, early and favorable action allowing these claims and passing this application to issue is respectfully solicited.

Respectfully submitted,

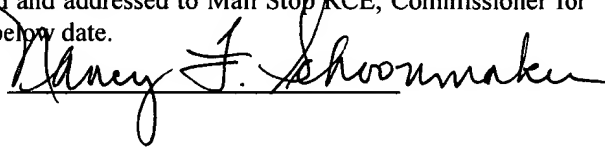
CHRISTENSEN O'CONNOR
JOHNSON KINDNESS^{PLLC}


Gary S. Kindness
Registration No. 22,178
Direct Dial No. 206.695.1702

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LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100